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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION N
10/694,227	10/28/2003	Peter T. C. Chieh	PLI-1159	2989
24984	7590	08/10/2005	EXAMINER	
ALBERT O COTA 5460 WHITE OAK AVE SUITE A-331 ENCINO, CA 91316			CRANSON JR, JAMES W	
			ART UNIT	PAPER NUMBER
			2875	

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/694,227	Applicant(s) CHIEH ET AL.	
	Examiner James W. Cranson	Art Unit 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5-7,9-12,15,16,18,20 and 21 is/are rejected.
- 7) ☒ Claim(s) 2-4,8,13,14,17 and 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claim Objections

Claim 8, according to claim 1, is objected to because a wheatstone bridge is a resistance bridge and a rectifier circuit and/or rectifying means requires the use of diodes.

Claim 13, according to claim 12, is objected to because translucent is recited in claim 12.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following claims have been rejected in light of the specification, but rendered the broadest interpretation [MPEP 2111]. Applicant should positively cite the structural limitations to be given full patentable weight within an apparatus claim.

Claims 1,6,7 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,584,561 to Lahos.

Lahos discloses rotary motion powered LEDs within a wheel producing visual effects.

Regarding claim 1:

Lahos discloses rotary motion (abstract) powered LEDs(36,136,140,142) comprising:

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permanent magnet generator (20) located within a vehicle wheel (12) (abstract) for producing electric power,
revolving means (column 3, lines 11-16) to rotate to supply AC current
ac/dc bridge rectifier (200, 201, column 3, lines 50-55) in electrical communication that changes AC current from permanent magnet generator to DC current and
plural LEDs (36, 136, 140, 142) disposed in vehicle wheel powered by DC to produce an unusual and unique visual effect when wheel rotates (column 3, lines 52-58).

Regarding claim 6, according to claim 1:

Lahos discloses and illustrates that revolving means comprises a vehicle wheel (figure 1).

Regarding claim 7, according to claim 1:

Lahos discloses and illustrates that wheel member has spokes. (figure 1).

Regarding claim 11, according to claim 1:

Lahos discloses and illustrates that the LEDs (136, 140, 142) are disposed within a transparent cap (128) that is attached to a vehicle wheel (figure 4).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 5, according to claim 1, and independent claims 20 and 21 are rejected under 35

U.S.C. 103(a) as being unpatentable over US 5,584,561 to Lahos in view of US

4,648,610 to Hegyi or to US 4,775,919 to Pearsall et al.

Regarding claim 5, according to claim 1, wherein a counter weight is affixed to the stationary side of the generator and differential rotation is obtained.

Lahos discloses the claimed limitations in claims 5, 20 and 21 except for a counter weight that is affixed to generator's stationary side (18, 32,34, column 2, lines 57-67) obtaining a differential rotation of generator.

Regarding claim 20:

Lahos discloses rotary motion (abstract) powered LEDs(36,136,140,142) comprising: permanent magnet generator (20)located within a vehicle wheel (12)(abstract) for producing electric power,

revolving means(column 3, lines 11-16) to rotate to supply AC current

ac/dc bridge rectifier (200,201, column 3, lines 50-55) in electrical communication that

changes AC current from permanent magnet generator to DC current and

plural LEDs (36,136,140,142) disposed in vehicle wheel powered by DC to produce an unusual and unique visual effect when wheel rotates (column 3, lines 52-58).

Regarding claim 21:

Lahos discloses rotary motion (abstract) powered LEDs(36,136,140,142) comprising:

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permanent magnet generator (20) located within a vehicle wheel (12) (abstract) for producing electric power, revolving means (column 3, lines 11-16) to rotate to supply AC current ac/dc bridge rectifier (200, 201, column 3, lines 50-55) in electrical communication that changes AC current from permanent magnet generator to DC current and plural LEDs (36, 136, 140, 142) disposed in vehicle wheel powered by DC to produce an unusual and unique visual effect when wheel rotates (column 3, lines 52-58).

Hegyí in a light emitting wheel with LED light produced with energy obtained from the motion of the wheel by use of a permanent magnet and electrically conducting coil wound around a magnetically permeable core teaches the use of a counter weight. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide Lahos with a counter weight as taught by Hegyí and attach the counter weight to the stationary side of the generator. The reason as taught by Hegyí (column 3, lines 10-12) is to restore balance to the wheel. Further, the obvious result of the combination of a counter weight affixed to a generator when a vehicle is turning a rotating portion of a generator is a differential rotation.

Claims 9 and 10, according to claim 1, are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,584,561 to Lahos in view of US 5,015,918 to Copeland.

Regarding claims 9 and 10:

Lahos does not disclose a voltage regulator or a current dropping resistor in electrical communication with the ac/dc bridge rectifier.

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Copeland in a bicycle single-wire lighting system teaches the use of a voltage regulator and a current dropping resistor in electrical communication with ac/dc bridge rectifier.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide Lahos with a voltage regulator and a current dropping resistor in electrical communication with ac/dc bridge rectifier. The reason is that it is well known in elementary circuit design to use either a current dropping resistor or a voltage regulator in combination with a voltage regulator and a current dropping resistor in electrical communication with an ac/dc bridge rectifier.

Regarding claim 12:

Claim 12, according to claim 1, is rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,584,561 to Lahos.

Lahos discloses the claimed invention except for a translucent cap enclosing the LEDs.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide Lahos with a translucent cap because it has been held that lacking any criticality, the selection of known material based on its suitability for the intended use for prior art parts does not make the claimed invention patentable over that prior art

(In re Leshin, 125 USPQ 416).

Regarding claim 15:

Claim 15, according to claim 1, is rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,584,561 to Lahos in view of US 6,116,763 to King.

Lahos does not disclose LEDs disposed within an assembly plate.

King in a rotating wheel illumination device teaches having LEDs disposed on an assembly plate. It would have been obvious to one of ordinary skill in the art at the time

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of the invention to provide Lahos with LEDs disposed on an assembly plate as taught by King. The reason is ease of manufacture and easy to maintain.

Regarding claim 16:

Claim 16, according to claim 1, is rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,584,561 to Lahos in view of US 6,565,24 to Cheung.

Lahos does not disclose LEDs disposed on a plurality of spokes of a wire spoke wheel. Cheung in a rotating wheel illumination device teaches having LEDs disposed on a plurality of spokes of a wire spoke wheel.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide Lahos with LEDs disposed on a plurality of spokes of a wire spoke wheel as taught by Cheung. The reason is the prior art and the instant invention are art recognized equivalents in decorative wheel lighting and well known in the illumination art.

Regarding claim 19:

Claim 19, according to claim 1, is rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,584,561 to Lahos in view of US 5,016,144 to DiMaggio.

Lahos does not disclose LEDs disposed within a wheel cover.

DiMaggio in a rotating wheel illumination device teaches having LEDs disposed within a wheel cover.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide Lahos with LEDs disposed within a wheel cover as taught by DiMaggio

The reason is the prior art and the instant invention are art recognized equivalents in decorative wheel lighting and well known in the illumination art as evidenced by abstract

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of DiMaggio that discusses using advance electronics to illuminate LEDs on vehicle wheel covers aesthetically arranged to create an illusionary effect.

Allowable Subject Matter

Claims 2- 4, 13, 14, 17 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Claim 2, according to claim 1 adds that permanent magnet generator further comprises a rotating portion comprises a base including means for attaching base to a vehicle wheel center, base having an inner and outer surface, case surrounding outer surface of base, pair of axle bearings pressed into base at spaced intervals, axle cover positioned on inner surface over axle bearings, plural armature laminations wound with armature coil winding and engaging the base and stationary portion comprising axle having snap ring on one pressed end into bearing races, tightening ring intimately gripping axle on an end opposite snap ring retaining the axle in place between the bearing and magnet frame ring so that permanent magnet generator produces alternating current.

This combination of limitations is not found or taught in the art of record.

Claims 3 and 4 depend from claim 2 and would be allowable for same reasons.

Claim 13, according to claim 12, adds that cap further comprises a reflective coating on a faceted inner surface and LEDs are in a geometrical array.

This combination of limitations is not found or taught in the art of record.

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Claim 14, according to claim 1, adds that cap further comprises an image molded therein, with the cap attached to the vehicle wheel.

This combination of limitations is not found or taught in the art of record.

Claim 17, according to claim 1, adds that LEDs are disposed within integral bars projecting radially from a wheel center portion of an alloy wheel.

This combination of limitations is not found or taught in the art of record.

Claim 19, according to claim 1, adds that LEDs are disposed within a spinning blade of a wheel spinner cover.

This combination of limitations is not found or taught in the art of record.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James W. Cranson whose telephone number is 571-272-2368. The examiner can normally be reached on Mon-Fri 8:30A.M.- 5:00P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandy O'Shea can be reached on 571-272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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THOMAS M. SEMBER
PRIMARY EXAMINER